

REMARKS

Claim 1. Claim 1 is amended to recite a constant speed, which is supported at page 9, lines 11-14. Claim 1 is now exemplified by the *first* embodiment, in which the image-forming transport speed V1 is *constant* and the return-path transport speeds V2/V3 are set according to the type (e.g., weight) of the medium. The first embodiment is described between page 6 and page 12, with “constant speed V1” at page 9, line 11.

The Applicant’s previous arguments were related largely to the *second* embodiment, which is described starting on page 12.

Hino. The new feature of constant image-forming speed (e.g., constant V1) is contrary to the teaching of Hino. Hino discloses a control unit 301 that varies the image forming transport speed according to the type of the medium (col. 8, line 66 to col. 9, line 3).

Hino discloses that (1) the paper transport speed is adjustable depending on the type of paper, and (2) the transport speed on the return path is the same as on the rest of the loop. That is, both the image-forming path speed and the return-path speed are variable, but they are always equal to one another.

Hino teaches that if the transport speed is changed to adapt to thick paper, then the paper-feeding time intervals should also be changed (col. 8, line 66 to col. 9, line 3).

Russel. Russel discloses a faster transport speed on a part of the return path. The Examiner points to the fourth paragraph in column 5 of Russel, which states (at lines 51-66), “Preferably [Russel’s machine employs] moving the receiving sheet at a faster speed during a portion of the return path remote from the fuser and transfer stations than ... between the transfer station and the fuser ... At some point ... it is fed at a speed that is faster than that of belt 42.”

However, Russel teaches strongly against *varying* the return-path speed as a function of paper type, because it teaches strongly against varying it. Russel describes how the sheets are held in the inverter with varying delay times for alignment purposes, and then writes (col. 8, line 46), “A similar result can be accomplished by *varying* the speed of movement ... in the unconstrained portion of the recirculating path [return path] and using a constant delay in the inverter. ***This approach is inferior*** to that just described with the variable delay in the inverter

because the recirculating path *transport becomes much more complicated and more difficult to control*. The same result could also be obtained by varying the actual physical length of the path. Again, this would require movement of guides or rollers and, again, would increase the expense ... while reducing its reliability" (emphasis added).

Thus, Russel teaches that the speed on the return path should be constant, and therefore should not change for different types or weights. The Examiner has cited col. 8, lines 1-10, reciting that "[the paper] can, at any point in the recirculation path, be sped up." The Applicant sees that the change from the fuser speed to the recirculation speed can take place at any *location* along the loop 69 which is downstream from the inverter 68, and notes that Russel does not say that the higher speed along the upper portion of the loop 69 (given as 750 mm/s) *varies*, but rather, says that it stays *constant* until the paper reaches the transfer station 62 and slows to fuser speed (524 mm/s). Of course, the speed must vary as a function of its location along the path, if it is to change from one speed to another, in the transition region; but that is different from the speed being inconstant at one point, for example by varying according to paper weight.

The Applicant respectfully submits that Russel teaches directly against "setting different transport speeds for different types of recording media on at least part of the return path, according to the type of recording medium," which is what the Applicant recites in claim 1.

Russel also teaches directly against what Hino discloses, i.e., varying the speed on the return path according to the paper weight. Russel also teaches contrary to Hino's teaching that if the transport speed is changed to adapt to thick paper, then the paper-feeding time intervals should also be changed.

The Asserted Combination. The rejection asserts modification of Hino in view of Russel (this is not admitted). In order to reach the Applicant's claim 1, the person of ordinary skill would have needed to make the speed in the return path vary according to the paper type. Hino discloses this; however, Russel teaches *against* this. If the person of ordinary skill, when modifying Hino, had followed the teachings of Russel, then he or she would have made Hino's return-path speed *constant*—and the Applicant's combination would not have been anticipated.

The rejection does not assert that the person of ordinary skill might have modified Russel according to Hino. Regardless, the Applicant believes that the person of ordinary skill would never have modified Russel to vary its return-path speed according to paper type, because Russel teaches strongly against this.

That is, the only way to reach the instant claims from the references—namely, to modify Russel, *only* in the return path, according to Hino—is a way that Russel teaches against and Hino does not teach toward.

Under the recent *KSR* case, predictability is an important factor. With respect, the instant claims could not have been predicted because the references do not suggest picking and choosing their features in just the manner to reach the claims, when the references themselves provide no support for such picking and choosing.

The rejection of claims 1, 8-17, 19, and 20 under §103 over Hino '906 in view of Russel '419 is respectfully traversed on the grounds set out above.

Claim 19. The rejection of independent claim 19 is respectfully traversed on the grounds set out below.

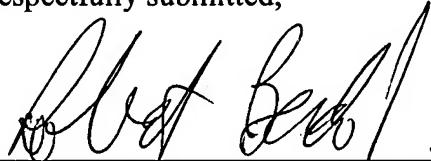
The Applicant argued that Russel is schematic and does not actually disclose the claimed feature. The Examiner has not attempted to refute this statement, but instead replies (Action at page 5, line 3) that the Applicant's own Fig. 1A is non-specific. With respect, the Examiner's remarks are irrelevant to the rejection because the Applicant's own disclosure is not at issue in a rejection under §103. Moreover, there is no motivation to experiment, as the Examiner asserts. The prior art does not suggest experimentation. The Applicant's disclosure cannot have suggested experimentation to the person of ordinary skill at the time of the invention.

Dependent Claims. Claims 2-7 were rejected over Hino, Russel and Kato. These, and the other dependent claims, are allowable by their dependence and for additional features, not argued at this time.

Claim 18. Independent claim 18 is allowed.

For the reasons above, withdrawal of the rejection, and allowance, are requested.

Respectfully submitted,



Robert H. Berdo, Jr. - Reg. No. 38,075
RABIN & BERDO, P.C.
CUSTOMER NO. 23995
Telephone: (202) 371-8976
Fax: (202) 408-0924

May 15, 2007

Date

RHB/NSB/vm